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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,766	02/06/2002	Nahoko Takano	Q68400	5813
23373	7590	10/06/2004	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			GANTT, ALAN T	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/066,766	<b>Applicant(s)</b> TAKANO ET AL.	
	<b>Examiner</b> Alan T. Gantt	<b>Art Unit</b> 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-27 is/are allowed.
- 6) ☒ Claim(s) 28,31,34 and 35 is/are rejected.
- 7) ☒ Claim(s) 29,30,32,33 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 35 is objected to because of the following informalities: "The base station claimed" should read "The mobile station". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 28, 31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al.

Regarding claim 28 Suzuki discloses a mobile radio communication system employing a time division multiple access scheme having a plurality of base stations and a plurality of personal stations, an arbitrary base station, when detecting a pilot signal transmitted from any master base station acts as a slave base station which does not transmit its pilot signal but transmits and receives a common control signal to and from a personal station utilizing a frequency channel occupied by the pilot channel. Suzuki suggests the following limitation:

a base station that is transmitting only a control signal transmits the control signal to a mobile station only if the control signal to the mobile station only if the signal quality from that mobile station is higher than a target quality. (col. 2, lines 55-67 - Suzuki shows that this is

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possible in that Suzuki utilizes a base station that transmits a pilot signal only when a received pilot signal has a level lower than a predetermined threshold and if the received pilot signal is higher than a predetermined threshold, the base station does not transmit is pilot signal but transmits a common control signal). Suzuki is silent regarding performing a soft handoff.

However, at the time of the applicant's invention it would have been obvious to modify Suzuki to utilize such the more modern CDMA systems that utilize time slots since the main mechanism of Suzuki is transportable to such system.

Regarding claim 31, Suzuki discloses a mobile radio communication system employing a time division multiple access scheme having a plurality of base stations and a plurality of personal stations, an arbitrary base station, when detecting a pilot signal transmitted from any master base station acts as a slave base station which does not transmit its pilot signal but transmits and receives a common control signal to and from a personal station utilizing a frequency channel occupied by the pilot channel. Suzuki suggests the following limitation:

a base station that is transmitting only a control signal transmits the control signal to a mobile station only if the control signal to the mobile station only if the signal quality from that mobile station is higher than a target quality. (col. 2, lines 55-67 - Suzuki shows that this is possible in that Suzuki utilizes a base station that transmits a pilot signal only when a received pilot signal has a level lower than a predetermined threshold and if the received pilot signal is higher than a predetermined threshold, the base station does not transmit is pilot signal but transmits a common control signal). Suzuki is silent regarding performing a soft handoff.

However, at the time of the applicant's invention it would have been obvious to modify Suzuki to utilize such the more modern CDMA systems that utilize time slots since the main mechanism of Suzuki is transportable to such system.

Regarding claim 34, Suzuki discloses a mobile radio communication system employing a time division multiple access scheme having a plurality of base stations and a plurality of personal stations, an arbitrary base station, when detecting a pilot signal transmitted from any master base station acts as a slave base station which does not transmit its pilot signal but transmits and receives a common control signal to and from a personal station utilizing a frequency channel occupied by the pilot channel. Suzuki suggests the following limitation:

a base station that is transmitting only a control signal transmits the control signal to a mobile station only if the control signal to the mobile station only if the signal quality from that mobile station is higher than a target quality. (col. 2, lines 55-67 - Suzuki shows that this is possible in that Suzuki utilizes a base station that transmits a pilot signal only when a received pilot signal has a level lower than a predetermined threshold and if the received pilot signal is higher than a predetermined threshold, the base station does not transmit is pilot signal but transmits a common control signal). Suzuki is silent regarding performing a soft handoff.

However, at the time of the applicant's invention it would have been obvious to modify Suzuki to utilize such the more modern CDMA systems that utilize time slots since the main mechanism of Suzuki is transportable to such system.

***Allowable Subject Matter***

3. Claims 1-27 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

A base station control method that allows the mobile station to select the serving base station and decide whether to utilize a transmission power control signal sent by the base and also make the determination based on its own velocity or estimates of its velocity that also allows another base station to decide whether it will send control signals to the mobile based on the sent velocity information was neither found, suggested, nor made evident by the prior art.

4. Claims 29, 30, 32, 33, 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 29, 30, 32, 33, and 36, a base station control method that allows the mobile station to select the serving base station and decide whether to utilize a transmission power control signal sent by the base and also make these determination based on its own velocity or estimates of its velocity that also allows another base station to decide whether it will send control signals to the mobile based on the sent velocity information was neither found, suggested, nor made evident by the prior art.

### ***Conclusion***

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (703) 305-0077. The examiner can normally be reached

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between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (703) 872-9306.

Any inquiry of a general nature or relating to this application should be directed to the group receptionist at telephone number (703) 305-4700.

*Alan T. Gantt*

Alan T. Gantt

September 30, 2004

*Nick Corsaro*

**NICK CORSARO  
PRIMARY EXAMINER**